IN THE CLAIMS

Claim 1 has been amended as follows:

1. (Currently amended) A method for vapor-depositing a layer of a needle-shaped x-ray luminophore with at least one alkali metal on a substrate ~~carrier~~, said method comprising providing a carrier, and simultaneously ~~vaporizing~~ co-vaporizing a mixture of at least one europium(III) oxyhalogenide with at least one alkali halogenide and vapor-depositing the vapor on the ~~carrier~~ substrate, to produce a ratio of an Eu concentration of the alkali halogenide layer in the proximity of the substrate to an Eu concentration of the alkali halogenide layer in the proximity of the substrate between 0.4 and 1.2.

Claim 2 has been amended as follows:

2. (Currently amended) A method according to claim 1, wherein the step of simultaneously ~~vaporizing~~ co-vaporizing utilizes a molybdenum vaporizer.

Claim 3 has been cancelled.

3. (Cancelled).

Claim 4 has been amended as follows:

4. (Currently amended) A method according to claim 1 ~~3~~, wherein ~~the concentration~~ said ratio is ~~reproduced~~ between ~~a factor of~~ 0.6 and 0.8.

Claim 5 has been amended as follows:

5. (Currently amended) A method according to claim 1, wherein the at least one europium(III) oxyhalogenide has a formula of Eu_3O_4Hal, wherein Hal is at least one halogenide from ~~a~~ the group consisting of F, Cl, Br and I.

Claim 6 has been amended as follows:

6. (Currently amended) A method according to claim 5, wherein the alkali halogenide comprises at least one metal selected from a group consisting of Na, K, Rb and Cs and at least one halogenide from the group consisting of F, Cl, Br and I.

Claim 7 has been amended as follows:

7. (Currently amended) A method according to claim 1, wherein the x-ray luminophore occurs according to the following formula:

AB/C:EuD,E

wherein A is ~~an~~ at least one alkali metal from a group consisting of Na, K, Rb and Cs; B and C are at least one halogenide from a group consisting of F, Cl, Br and I; wherein C can ~~equal 0~~ be omitted and D and E are at least one halogenide from a group consisting of F, Cl, Br and I, wherein ~~A, D and/or E~~ D and E can be equal.

Claim 8 has been amended as follows:

8. (Currently amended) A method according to claim 7, ~~wherein the depositing of~~ comprising vapor depositing the layer on the ~~carrier forms~~ substrate to form a storage luminophore plate.